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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/263,805	03/08/1999	YOSHIHIKO HIROTA	49733-016	2255

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EXAMINER	
WU, JINGGE	
ART UNIT	**PAPER NUMBER**
2623	8

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/263,805	Applicant(s) HIROTA ET AL.	
	Examiner Jingge Wu	Art Unit 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *08 March 1999* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) *1-57* is/are pending in the application.

4a) Of the above claim(s) *45-51,54,55 and 57* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-4,7,8,10-19,22-24,28-30,32,33,35-37,40,41,43,44,52,53 and 56* is/are rejected.

7)☐ Claim(s) *5,6,9,20,21,25-27,31,34,38,39 and 42* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *4* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. Applicant's election without traverse of species I in paper No. 7 is acknowledged and made o f the record. Claims 1-44, 52-53, and 56 are presented for prosecution. Claims 45-51, 54-55, and 57 are withdrawn from consideration.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-2, 15-17, 22-24, 28, 32, 35, and 56 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5282026 to Nagata.

As to claim 1, Nagata discloses an image processing apparatus including:

first determining means (fig.6, elements 4-6) for determining a color pixel (col. 5 lines 12-29);

means for dividing the image into a plurality block (fig. 6, elements 8-11, col. 5 lines 30-45);

counting means for counting the number of color pixels for each block (fig. 6, element 10); and

second determining means for discriminating an color image based on the counting results by counting means (fig. 6, element 15, col. 6 lines 1-6).

As to claim 56, the claim is a corresponding method claim to claim 1. The discussion is addressed with regard to claim 1.

As to claim 2, Nagata further discloses third determination means for determining color block (fig. 6, element 9, col. 5 lines 30-37).

As to claim 15, Nagata further discloses the block is color block when the number of color pixels exceed a threshold (THN) (col. 5 lines 30-37).

As to claim 16, Nagata further discloses the second determining means determines an image as an color image based on the result of the color block determining means (fig. 6, col. 5 line 30-col. 6 lines 6).

As to claim 17, Nagata further discloses means for designating the block in certain portion (col. 5 line 30-col. 6 lines 6, note that color block in third line, for example).

As to claim 22, Nagata further discloses the determining means for determining an image as color image when number of color blocks exceed a threshold (col. 5 lines 38-col. 6 line 6).

As to claim 23, the discussion is addressed with regard to claim 16.

As to claims 24 and 28, Nagata further discloses a group processing means for summing up the color pixels for a groups of color blocks adjacent to each other and deciding an image as an color image based on the result that is exceeding a threshold (fig. 4-5, col. 4 lines 19-53).

As to clam 35, Nagata further discloses the counting operation stops when the determining means deciding a color image signals (col. 5 lines 50-68, note that if any

line has more than 80 continuous color pixels than the line is color line and stop counting).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 3-4, 7-8, 10-14, 36-37, and 40-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagata in view of US 5751854 to Saitoh et al..

As to claim 3, Nagata does not discloses ratio of number of color pixel to that of entire pixels in the block.

Saitoh, in an analogous environment, discloses using ratio of number of color pixel to that of entire pixels in the block to determine whether a block is particular color block (col. 56, lines 8-46).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the scheme of Saitoh in the apparatus of Nagata in order to accurately and quickly determine the color area. Doing so would increase the efficiency and accuracy of the apparatus.

As to claims 4 and 7, Saitoh further discloses a special color is determined or designated (col. 56, lines 23-34 and fig, 64).

As to claims 8, and 11-12, Saitoh further discloses the threshold differs from each other and designating a block in certain area (special document area) (col. 56, line 8-col. 58 line 24).

As to claim 13, the discussion is addressed with regard to claims 24 and 35.

As to claims 10 and 14, the combination of Nagata and Saitoh does not teaches adjusting threshold .

However, Examiner takes Official Notice that the feature of adjusting threshold is notoriously well known in the art.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the threshold adjusting scheme to set a threshold in the apparatus of Nagata in order to accurately and quickly determine a special color area. Doing so would increase the efficiency and accuracy of the apparatus.

As to claims 36-37 and 40-41, Nagata does not discloses saturation of color pixels.

Saitoh, in an analogous environment, discloses using saturation data of color pixel for discriminating a particular color area that the threshold is different from those of other areas (col. 78 line 62-col. 79 line 29).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the color saturation scheme of Saitoh to set a threshold in the apparatus of Nagata in order to accurately and quickly determine a special color area. Doing so would increase the efficiency and accuracy of the apparatus.

As to claims 43 and 44, the discussions are addressed with regard to claims 10 and 40.

6. Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagata in view of US 5296939 to Suzuki.

As to claim 18, Nagata does not teach the ratio of color blocks versus all blocks of the image.

Suzuki, in an analogous environment, discloses using ratio of number of color block to that of the blocks to determine whether the image is color image (col. 7 lines 22-49).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the scheme of Suzuki in the apparatus of Nagata in order to accurately and quickly determine the color image. Doing so would increase the efficiency and accuracy of the apparatus.

As to claim 19, the discussion is addressed with regard to claim 10.

7. Claims 29-30, 32-33, and 52-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagata in view of US 5287204 to Koizumi et al.

As to claims 29 and 32, Nagata does not disclose excluding a block or correcting counting result.

Koizumi, in an analogous environment, discloses excluding or correcting (not counting) a monochromatic block in certain portion of image from the determination (col. 9, lines 3-26).

As to claims 30 and 33, Koizumi further discloses the portion includes peripheral portion of the image (col. 10 lines 7-23).

As to claim 52, Nagata discloses all limitations except printing means.

Koizumi, in an analogous environment, discloses printing (copying)means (fig. 2, element 34) to print either color printing or monochrome printing based on the color discrimination result (col. 10 lines 24-60).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the scheme of Koizumi in the apparatus of Nagata in order to accurately and quickly print the color image or monochromatic image. Doing so would increase the efficiency of the apparatus.

As to claim 53, Koizumi further discloses a scanner (fig. 2 element 40, col. 4 lines 50)

Allowable Subject Matter

8. Claims 5-6, 9, 20-21, 25-27, 31, 34, 38-39, and 42 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 5786906 to Schishizuka, US 5973804 to Yamada, and US 6240203 to Kawano et al. disclose methods for discriminating color images.

Contact information

10. Any inquiry concerning this communication or earlier communications should be directed to Jingge Wu whose telephone number is (703) 308-9588. He can normally be reached Monday through Thursday from 8:00 am to 5:30 pm. The examiner can be also reached on second alternate Fridays.

Any inquiry of a general nature or relating to the status of this application should be directed to TC customer service whose telephone number is (703) 306-0377.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Amelia Au, can be reached at (703) 308-6604.

The Working Group Fax number is (703) 872-9314.

Jingge Wu

Patent Examiner

Art Unit 2623

12/15/01